Supervisory Management

MAY 1956

THE BOSS HATER

It took a sudden shock to make this supervisor realize why his bosses had always been "wrong"

SPECIAL

JOHN TIRABASSI . . . FOREMAN

Twelve pages of candid-camera shots showing how one foreman spends an average workday

INTEGRATED DATA PROCESSING

By simple explanations, one company gained employee acceptance of new machines

AMERICAN MANAGEMENT ASSOCIATION

I'm a foreman...

and my biggest problems...

are handling people and machines...

That's what John Tirabassi, foreman, told us the day we followed him around the General Foods' Franklin Baker plant, in Hoboken, N. J., where he supervises the Jello and pudding operations. It was a long day—from 6:30 A.M. to 3:45 P.M.—and one that was full of problems. The story of what happened to John Tirabassi and what he did during a typical day at work appears on page 26.

Supervisory Management

VOL. 1 NO. 6 MAY 1956

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SUPERVISORY MANAGEMENT is published monthly by the American Management Association, 1515 Broadway, Times Square, New York 36, N. Y. The Association does not necessarily stand sponsor for views expressed by the authors in articles issued in or as its publications. Subscriptions: $6.50 per year (nonmembers $7.50), bulk rates available. Volume 1, No. 6, May, 1956. Copyright 1956, American Management Association, Inc.

SCOREBOARDS BOOST PRODUCTION

By John Walsh and Max Skousen

Supervisors at one company post production figures on a scoreboard. They find it increases workers' job satisfaction—makes them really want to work

ROBERT OWEN, the famous English philanthropist (1771-1858), found himself managing a cotton mill while he was still a young man. He was not yet an industrialist, but he was a student of human nature. One morning he arrived at the mill with three spools of colored ribbon – yellow, green, and red. When the workers came on the job, they found a piece of ribbon tied to each machine. Some machines had one color ribbon, some another. Everyone buzzed with curiosity.

After several days, the word got around. Red ribbons were tied to all the machines that were producing above the factory average. Green ribbons represented average output. Yellow ribbons were on the below-average machines. Owen's use of the ribbons was not meant as a threat. He was merely letting the people know how they were doing. The ef-

fect was electrifying. Within two months, every ribbon in the factory was red. Production was high; morale was good.

This amazingly effective experiment was conducted a long time ago, but in the years that have followed, many people in management have failed to make use of this valuable experiment. The colored ribbons enabled the workers to keep score, to compete with each other, and to set up personal objectives. Owen had used a simple, economical, but extremely effective motivation control—a way to make people want to work harder.

Most people work because they get paid for it. Yet no one will work for money alone, because money alone has no value. Money is only important to the extent that it buys security, recognition, achievement, and comforts. Lucky is the man who works at a job that not only gives him dollars but also furnishes the additional rewards of personal recognition, a feeling of achievement, the reality of accomplishment, and freedom of expression. In addition to his wages, such a man is getting real "satisfaction pay" for his efforts

Although most supervisors realize the motivational power of recognition, few use it often enough. A work force produces power for a factory just as the motor produces power for an automobile. A car cannot run on gasoline alone. It must have the proper mixture of oxygen to ignite the fuel fully. To a work force, wages are the basic fuel, but recognition is oxygen. If we choke down on recognition, we may get a fair start, but it won't be long until the monetary fuel is running out the exhaust without providing the full production intended.

One indication of poor industrial carburetion is when workers quit their jobs at the drop of a hat to accept a few dollars a week more somewhere else. They're not fools: if all they get out of their jobs is money, money is all they will work for.

Mr. Owen's ribbons had effective results because they told his people that he knew how they were doing and that he was interested.

It's a well-established fact that appreciation and encouragement are powerful motivation tools and that a failure to provide recognition to employees costs dearly in lower production. The worker who fails to get a feeling of achievement from his job has little incentive to do anything more than just get by. He finds little challenge in his work. His job seems unimportant, and he feels unimportant. In addition, since most workers have rather specialized, restrictive

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jobs, they often find little opportunity for growth in skill and knowledge.

Some supervisors seldom encourage their groups to show initiative and creativeness. And when the workers do a good job, little is said about it. They're like the husband of the woman who was determined to get praise for her cooking. One day she prepared an elaborate feast that would have brought honor to a chef. The meal was almost over, but her husband had said nothing.

Finally, in desperation, the wife asked, "Didn't you like the dinner, George?"

George looked up in amazement and replied defensively, "I'm eating it, ain't I?"

Many different systems

Many supervisors have found ways of creating job stimulus by using a definite system that provides recognition, competition, and achievement for their groups. There are many different systems that can be used, but most can be classified as motivation controls. If properly handled, a motivation control enables a supervisor to encourage his people almost automatically.

Controls must be tailor-made for each situation, although they are more easily established for repetitive jobs. Repetition makes it easier to set up comparisons in amount of output or manpower expenditure. Here's a motivation-control system that was developed for a repetitive job at Lockheed Aircraft:

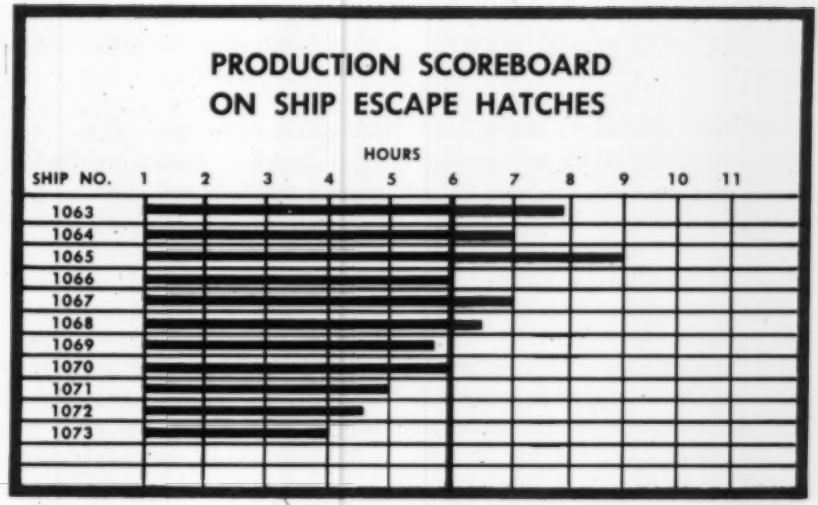
Supervisors assemblying a patrol ship recognized that their workers needed some score-keeping device to measure their individual efficiency. Therefore, with the help of the Time Standards Department, the jobs were divided so that each worker "owned" a certain part of the work on each airplane. Every worker recorded the amount of time it took him to complete his job on each ship. This information was posted on the worker's personal production chart.

A sample of the chart showing work on escape hatches appears on opposite page. The scale across the top shows the amount of time used on each ship. Ship numbers are posted on each line; the major vertical line represents the budget time for the job. If the worker required more than the budgeted allowance on a ship, the excess time was shown in red.

Results paid off

Through a simple device, therefore, the supervisor let each worker keep score, and the motivational power of the bar charts was very effective. Within nine months of the time the bar charts were started, the required hours per ship had been reduced as much as 25 per cent on most of the repetitive assembly jobs.

It is important to realize that the charts would not have worked well if they had been used as a basis for blame. Instead, the supervisors used them as a means of giving credit and recognition. Each man found himself competing with his own previous record, and the job of keeping up pro-



duction became as important to the worker as it was to the supervisor.

Nonrepetitive jobs

It's much harder to set up motivation controls for nonrepetitive jobs on which standard measurements of performance cannot be established. An example of this kind of job is the fighter flight line operation at Lockheed. The supervisor in charge of the final shakedown group realized that his crew did not do repetitive work like the production line. It was true that they had similar functions to perform on each plane, but the condition of some planes required more than twice as much work as others. In addition, the shakedown operation is a group task and could not be broken down into specific standard jobs. As a result, the supervisor decided to measure the operation in whole segments.

The supervisor started by keeping four charts. The first bar chart showed the work hours put in on each plane. The second chart showed the number of company squawks (inspection complaints) on each ship. The third showed the number of complaints the Air Force inspectors made on accepting a ship, and the fourth charted the amount of Air Force inspection time.

Man-hours per ship had been ranging between 200 and 400, with an average of around 250. When the charts were posted, the mechanics became interested in the comparison of hours between ships. Other groups, such as inspection and production control, were also interested and offered suggestions. Within a month, the record time for a ship had been cut to 132 hours. Two weeks later, a ship was completed in 92 hours. Then the record dropped to 72 hours.

Even more important, within two

months from the time the chart system was introduced, the average man-hours per ship had been cut from 250 to slightly less than 150 hours, saving 100 hours per ship. Air Force complaints, which had always been negligible, remained low. And surprisingly enough, the Air Force inspectors reduced their inspection time from eight hours to three.

The two examples of bar charts, as well as the story of Robert Owen's colored ribbons, show what a supervisor can do to stimulate workers. The high level of productivity these supervisors obtained was not the result of fear, nagging, or unjustified demands. It was the result of a systematic way of letting everyone know how he was doing, just the way the scoreboard at a ball park keeps everyone posted on how the game stands. With such aids, the supervisor doesn't have to worry about production when he leaves the department for a short time, because the workers become as interested in production as he is.

It has been said that individuals usually produce more when they know the following about their work:

1. What they are supposed to do.
2. What authority they have.
3. What their relationships are with other people.
4. What constitutes a job well done.
5. What they are doing exceptionally well.
6. Where they fall short.
7. What they can do to improve unsatisfactory results.
8. That what they are doing and thinking is of genuine importance.
9. That the boss has a deep interest in and concern for them.
10. That the boss is anxious for them to succeed and progress.
11. That there are just rewards for jobs exceptionally well done.

It's apparent from this list of what workers want to know that motivation controls, simple as they are, can help a supervisor satisfy many of these critical needs. Workers become aware of specific objectives and know more about what they are expected to accomplish. They feel more responsibility for the work and realize the importance of their contribution to completing the job, as well as the contributions of other workers.

Even more important, perhaps, positive controls show the workers that the supervisor is really interested in what they are doing. Employees know they will get recognition for a job well done, because the charts are on the wall for all to see.

Motivation controls work best when these simple rules are followed:

1. *Get the people in on the act.* Most of us tend to resent dictatorial restrictions. Motivation controls work best when the workers have some say about the process. Let them in on all or part of the planning. This can be done in an open problem discussion or through suggestions, written or verbal, on a proposed plan. Many supervisors have found that people will usually establish tighter restrictions on themselves than they will willingly accept from others.

2. *Sell the plan to the group.* Max-

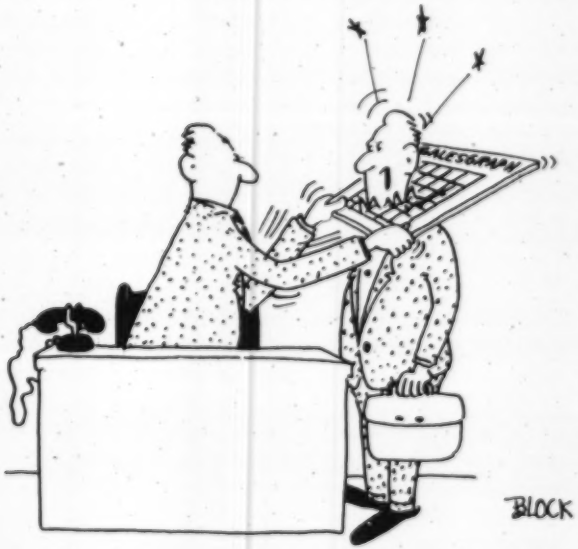
imum cooperation can be expected only if plans are sold to the workers before they are put into effect. This means the plans have to be explained. If the group agrees that its objective is important and beneficial, the controls are more likely to work. When workers see the seriousness and possible consequences of a problem, as well as the benefits of a solution, use of a control device makes good sense.

Many times a supervisor expects little more than compliance from those below the supervisory level—and that's the reason he often gets no more than that.

3. *Apply controls to smallest group possible.* Individuals are more frequently motivated when they realize that the part they play is significant. The larger the group, the more difficult this realization may be. In a smaller group, it is easier for an individual worker to sense his contribution. The strongest motivation controls combine individual recognition with team or group recognition.

4. *Use delegation as a key.* It does little good to get people enthused about solving problems and improving the work if we allow them little initiative through denials, restrictions, and limitations. Let workers know that you respect their interests and ideas enough to back up their recommendations. Delegation means more than the right to run errands. Delegation also means the right to make certain decisions and carry out certain responsibilities.

5. *Provide visual comparison.* Cold figures come to life when they are



"Are you trying to tell me the deal is off, C. B.?"

portrayed visually. There are many ways information can be put in a form that everyone can see at a glance. Here are a few suggestions:

a. Bar chart: Depicts quantity or percentage by a vertical or horizontal bar.

b. Target chart: Shows progressive movement toward a particular goal. A thermometer chart, for example.

c. Completion chart: Shows filled-in portions for the accomplishment of particular goals.

d. Check list: Indicates sequence of accomplishment.

e. Report: Explains results, use of time, conclusions or findings.

Whatever device is used, certain principles should guide the use of any visual motivation control. Displays must be simple, easily understood, and placed so that they receive maximum attention. In addition, information on any display or chart loses impact unless it is current and neat. If numerous factors are involved, separate charts should be used to show each single factor or similar group of factors.

6. *Make them easy to maintain.* One problem in devising a control is finding a simple, economical way to obtain the information on which the control is based. An elaborate system may prove as troublesome as the original problem, or it may cost as much as it saves. Generally speaking, any time the paper work on a motivational control is elaborate and complex, the supervisor should analyze his problem again to see if another method wouldn't be better. Rather than back away completely, he can determine whether his control would work through random sampling, or whether part of the necessary information is already available through interpretations of existing reports.

7. *Make them self-administering, if possible.* Very often when workers are asked to help solve a problem, they will administer their own control system. Such controls usually work well because the group is anxious to see their own proposal succeed. They may keep their own records and fill in the control chart. For instance, one supervisor with a housekeeping problem had his men take turns serving as housekeeping judges. The results were amazingly good.

8. *Give them constant attention.* Usually a control gets no more interest from the group than it does from the supervisor. A control becomes meaningless when the workers find that the boss pays little attention to it. Thus, the supervisor must be imaginative in finding methods to bring the results of the control to the attention of his people. He may do this in group meetings, by departmental memos, through letters to his superior with copies circulating to the group, or by special notes on the bulletin board. His minimum effort in this regard is to look at the controls at frequent intervals and he should do so in the presence of his crew.

9. *Apply controls in a positive way.* Motivation controls work best when emphasis is on recognition and praise for those doing satisfactory or

exceptional work. If workers feel that the information is being used as a basis for blame, they can find ways to justify themselves or to "rig" the information. It is not easy to have a control that is 100 per cent equitable in all respects, since many factors beyond a person's control may enter into the final results. If a worker is blamed for things beyond his control, he naturally grows resentful. The supervisor, therefore, must make every effort to operate the control fairly and to avoid using the information as a means of blaming people. Through encouragement and recognition, the supervisor uses the control as a positive motivation. His attitude towards those who appear to be doing poorly should be one of helpfulness and cooperation.

10. *Follow up.* While the control is needed and in use, there should be constant and systematic on-the-job follow-up. Since the best motivation controls are only symptoms of what is occurring, they show a better picture only if underlying causes improve. Improved methods, more efficient use of time and material, more efficient storage or flow of work in process, timely accuracy checks—a whole host of small ways to increase productivity can be found and used by workers if the supervisor follows up the original incentive supplied by the control device. However, a control should be used only as long as it is needed. When the need has been met, the control should be modified or dropped.

It's apparent from this list of rules that motivation controls today are somewhat more complicated than in Robert Owen's day, just as industry is more complicated. Owen depended completely upon surprise and an air of mystery. Although today's supervisor may occasionally use the surprise element, he certainly cannot depend upon it solely. Sustained motivation controls rely upon sustained, genuine communication between supervisor and worker. ◆

Spreading the Risk

When an insurance company sells a policy for a very large amount, the transaction is by no means finished, because the insurance company then buys itself some reinsurance. Reinsurance is a very complicated process in which the insurance company keeps a small part of the risk for itself and sells the rest to a professional reinsurer. The professional reinsurer then does the same thing—keeping a small part of the risk himself and selling the rest to *his* reinsurer. The process may continue until the risk is spread all over the country, or even all over the world. There are some insurance policies in American industry today, sold by American companies, which will be paid in American dollars if the industry suffers a big loss. But before the transaction is over, checks will probably have been drawn in pounds, francs, lire, pesetas, dinars, krona, rupees, drachmas, yen—and possibly other currencies as well!

—Edward G. Lowry, in AMA's *Insurance Series* No. 107

UNDERSTANDING OUR MISUNDERSTANDINGS

There are three main barriers to effective communication: preconceived ideas, emotion, and language. Here's how to overcome them

By William G. Butt

DURING World War II the armed forces conducted an educational program called "Know Your Enemy." This campaign represented an attempt to familiarize the military personnel of this country with the people and equipment they were fighting.

Similarly, those of us who are concerned with teaching the skills of communication try to describe to our students the real enemy of effective communication — misunderstanding. It is as important to know what we are fighting as it is for us to know our own weapons.

There are three major causes of misunderstanding, and supervisory personnel are especially susceptible to all of them. These primary obstacles to effective communication are: 1. Preconceived ideas, 2. emotions, 3. language.

A preconceived idea can be a stumbling block to understanding because people tend to rely on ideas that have been with them a long time. A supervisor who is called upon to explain a new process to his subordinates (or to his superiors, for that matter) faces a difficult task. He will very often meet with objections before he has completed his description of the process.

Marconi, for example, was hauled into court on fraud charges when he attempted to solicit funds for his ex-

periments with the wireless. Because his idea was new, people were ready to reject it before they heard the entire story. The fact that the invention would revolutionize electronic communications meant nothing to them.

Many ideas people have held for a long period of time have assumed the status of instinct. In the stress of battle, men who came from fine homes, who possessed excellent educational backgrounds, and who were prepared for combat by the best-known methods forgot their training and attempted to dig holes in the ground like animals, hoping to hide themselves instead of moving forward to protect their fellow soldiers. The so-called animal instincts of self-preservation and the survival of the fittest were much stronger than the newer ideas of responsibility for others and *esprit de corps*. Even the concepts of civilization are often too recent to stand up against older beliefs.

When a supervisor is asked to explain a new idea to his associates he should be prepared to face rejection or misunderstanding. There will be resistance to the idea, not because of weaknesses in the idea itself but because of its newness.

The mind plays second fiddle

The second obstacle to communication is emotion. E. L. Thorndike, the famous psychologist, once said that only 15 per cent of our thinking is logical; 85 per cent is emotional. This means that 85 per cent of the time we react to communication with our feelings instead of with our brains. The employee who receives a communication from someone with whom he has had an unhappy experience will raise objections to the material because of the person the communication is from rather than because of the material itself, though he may be quite unaware of why he does so.

Many times we hear statements like this: "Here's another one of those memos from the main office. All those guys do is sit behind their desks and dream up ways to complicate life for the people who do the real work." In a case like this, the communication was evaluated before it was even read. It was rejected on the basis of feeling rather than reason.

Although human beings are rated above other members of the animal kingdom because of their reasoning power, it should be remembered that people use their reasoning powers only a fraction of the time. Misunderstandings occur when listening or reading is combined with feeling rather than thinking. Strangely enough, the fellow who says, "How do you *feel* about this?" instead of, "What do you *think* about this?" may not be far wrong.

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Language, the third obstacle to good communication, is probably the most obvious of the three. Although most of us use everyday American English, we may not really be speaking the same language. I can remember a friend of mine in Mississippi who told me that he was going to *carry* his mother to the doctor. Immediately I had a mental picture of this rather small man carrying his mother piggy back down the street. Later I learned that the current Mississippi definition of "to carry" is "to transport by automobile."

One of the most common faults in communication is the assumption that everyone uses words in exactly the same fashion as we do. This misconception has caused more trouble at the bargaining table than any other single factor.

Some suggested solutions

Solutions to the problems of misunderstanding are difficult to achieve. But the supervisor who realizes that barriers do exist will be in a much better position to learn to overcome them.

Patience is necessary to break down the barrier of ideas. De-emphasizing the newness of a plan and stressing its practicality will improve its chances of acceptance.

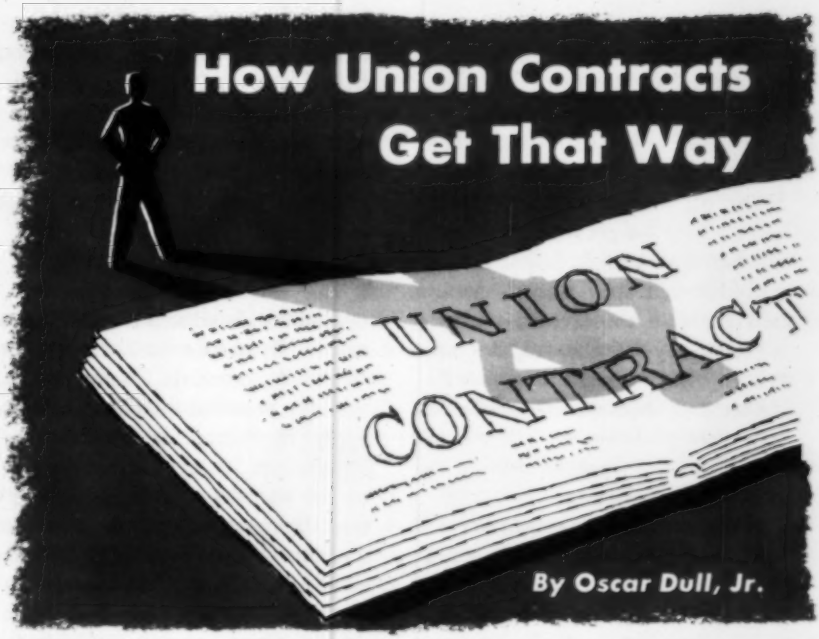
Patience is also necessary to overcome the barrier of emotion. The supervisor who takes the time to establish good personal relations with his fellow workers will find his suggestions and directives more readily accepted. Confidence in the originator of a communication breeds confidence in the value of the communication itself.

Finally, the problem of language can be solved when the sender of a communication remembers to put his message in words that the receiver understands. Too many people write or speak in language that they understand rather than in the language that the reader or listener understands. The process of communicating in the other fellow's language takes a great amount of planning, but the results are well worth the effort.

The old adage, "What you are speaks more loudly than what you say," is most applicable in the communication situation. The supervisor who recognizes these barriers in his own mind and sincerely seeks to eliminate them serves as an example to all who work and associate with him. The process of understanding our misunderstandings is contagious. ◆

Since 1950, our population has increased by more than 15,800,000, or four Irelands. We passed the 167-million mark in February. Between now and 1960, our market will increase by almost a whole Canada. Between 1960 and 1965, it will increase by the equivalent of a Holland or two Switzerlands. In 1965, there will be more than 190 million of us. These are the increases to which we must attune our businesses.

—Vergel D. Reed, at AMA's Marketing Conference, New York City



There's a good chance a foreman may be responsible for those tough union contract demands. Here's why—and what he can do about them

SOMETIMES the supervisor takes an active part in union-management contract negotiations. Sometimes he doesn't. In any case, the contract is still something he has to live with. Often this isn't easy. There are a lot of clauses in contracts that complicate the supervisor's job. He may wonder how the union ever succeeded in talking management into going along with some of the provisions that appear in the contract.

What the supervisor may not realize is that the way he handles his people is frequently a factor behind many of the demands made by the union. Here are some examples of how certain clauses get into a contract and what a supervisor can do to improve them:

A common clause, subject to local variations, states: "Overtime will be distributed equally in each department among employees capable of performing the available work." Did you ever wonder how that clause got into the contract? Well, one reason might be that a foreman gave the

lion's share of available overtime work to a favored few in his crew. Perhaps it was favoritism, perhaps it just happened to be convenient, or perhaps the other men were not as well qualified for the work.

The foreman could undoubtedly explain why he picked the men he did, but that doesn't help the other men who felt they weren't getting their share of those extra overtime dollars. They felt cheated, discriminated against; thought they were being treated unjustly. In most cases they were probably sure they could have done the work as well as the men who were chosen.

A supervisor has to remember that he is dealing with feelings as well as facts, and the facts may well be regarded as being of minor importance by the men involved. One thing is certain: men who are disgruntled make their feelings known at the union meetings. There's a good chance their gripes will end up as union demands at the bargaining table.

As with most human relations problems, there is no pat answer. Thought must be given to work scheduling. Some additional training may be necessary. Some small sacrifices in quantity may have to be made initially. The supervisor should try to work out the best way to schedule overtime rather than wait for it to become a contractual obligation. He should think in terms of intelligent management rather than in terms of his rights as a foreman. Good management moves along freely; prerogatives and privileges may be restricted if not wisely used.

Open jobs

Another familiar contract clause reads: "Open jobs shall be posted on plant bulletin boards. Employees who have the required qualifications may apply, in writing, to the Personnel Department."Again, there are a number of variations having to do with time limits, trial periods, proof of qualifications, and seniority. Did you ever wonder how this clause got in? It's another restriction on the foreman's rights: he can't just pick the man he wants any more. Now there are applicants for the job who have expressed their preference in writing and who must be considered. Maybe the foreman will have to give a trial period to several men.

Why the change? Why can't the foreman continue to pick the man he wants? Probably because somewhere along the line a foreman picked a friend for a job, even though the man wasn't as well qualified as some of the others who may even have had greater seniority. At the time, the

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foreman had the right to pick the man he wanted. There was nothing in the contract governing his choice. But now there is. The rights of others were disregarded, and the union fought back—at the bargaining table.

Call-in pay

Another fairly standard contract clause concerns call-in pay. This generally requires that men who report for work and are then told there is no work and are sent home shall receive three or four hours' call-in pay. There is generally a modifying "beyond the control of management" clause. But some arbitrators won't even give the company an out if a breakdown is due to lack of preventive maintenance. Is this unjust? Perhaps. But it is equally unfair to have employees get up at an early hour, drive to the plant, and then be told there is no work—and no pay. Obviously, this has happened many times to many people with the same result we have noted before—a demand at the bargaining table.

Take the time to examine your labor contract closely. List the clauses that govern what you consider to be your rights as a foreman. Reflect a bit on why they have been included in the contract. You will usually be able to recall some action that might have been the basis for the union's inserting that clause in the contract. It's a certainty that abuse of privileges by either management or workers will soon show up as limitations of those privileges, either as a contract provision or a plant rule.

Examine the contract-clause examples we have used. For instance, take the distribution of overtime. The average man wants and often needs those extra dollars. Unless he thoroughly believes he is not qualified for the available work, he is certain to question your motives if you consistently pick the same few men for overtime. If you can't clearly explain your choice, it probably means that you are not being fair. Continued disregard of the rights of others will only lead to rules governing the selection of men for all overtime work.

The second contract example concerned job openings and promotions. After a man has worked a long time for a company, he looks forward to a better job. This may mean more money, a different shift, a cleaner occupation, easier work—any one of a number of things. When he sees a man with far less service get a job he's interested in, he is hurt and resentful. This is doubly true if he feels he has not even been considered.

A simple solution

This is a normal reaction, one that you would experience if it happened to you. The solution is simple. Know your men well enough to be familiar with their capabilities and their hopes. When there is a job opening, carefully weigh the qualifications of the men available before filling the job. Make sure that men of longer service who are passed over understand why they are not being assigned to the open job. Let them know they have been considered and that there is a valid

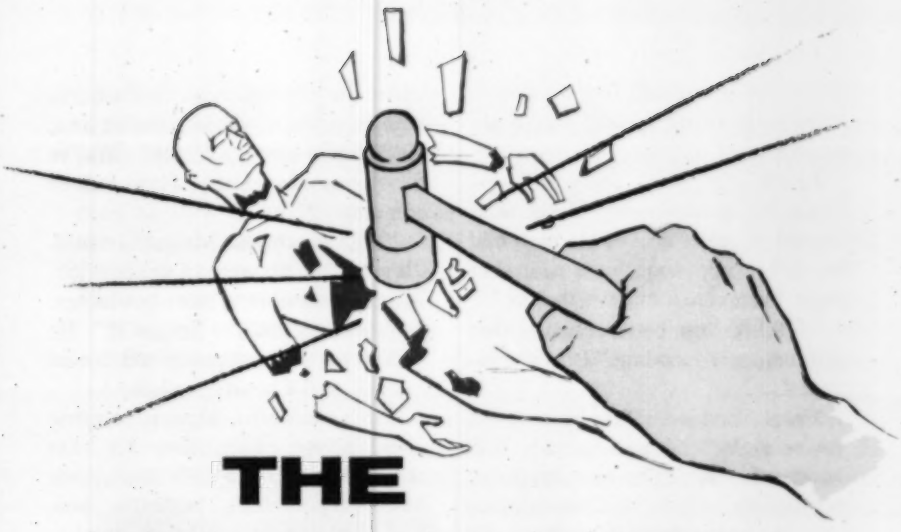
reason for their not having been chosen.

The final example concerning contract clauses dealt with call-in pay. Unquestionably there will be some cases where the situation is beyond your control. You can, however, plan the work of your section or department to the best of your ability with the information at your disposal. If you see a hole in the schedule, do what you can about it promptly. If you are unable to plug the hole, let your men know about it. People are usually sympathetic to problems if they understand the problems.

To sum up briefly: A supervisor should keep in mind the end result of whatever action he takes. Consider how it would affect you if you were on the receiving end. If you can't justify your reasons to yourself, it means you're not being fair. Give the other fellow the benefit of the doubt. He has problems, too, and he may not know or understand yours. Whenever you feel like griping about a contract clause, think about it first in the light of how it might have happened to get there. Did you help put it there? Could you help to get it modified by your actions in your job?

Above all, give thought to the long-range viewpoint. You may be able to cover up your conscience for a long time, but you have to meet the labor agreement face-to-face on a daily basis. ◆

"I'll certainly be glad when Jerry's wife gets back from her vacation."



THE BOSS HATER

Frank Shelton, foreman, didn't like his boss, but as his wife pointed out, he'd never liked any of his bosses. It was a shocker when he found out why

FRANK SHELTON hadn't been a foreman in the shipping department very long before the trouble started. He wasn't quite sure how it began. All he knew was that the general foreman, Jim Lowell, was getting on his nerves. There hadn't been any open arguments or any real disagreements. But Frank felt his irritation growing, his satisfaction with his job lessening. And he couldn't quite put his finger on the reason—not for a while.

One day, however, his vague feelings were pinpointed. He'd been busy all morning moving skids into the new addition at the end of the building. Two of his men were off sick and one of the lift truck operators was inexperienced, so things hadn't been going too smoothly. Just before lunch, Lowell came to examine the progress of the job. The very fact that he dropped by irked Frank. Didn't he trust Frank to get things done? Moreover, Lowell had to put in his two cents' worth about the way the skids were being stacked.

"Frank," he said, "I wouldn't pile those so high if I were you. They're liable to topple over. And keep an eye on your aisle markers, particularly at the corners. You've got skids sticking out of a couple of places

down the line there, and someone's going to catch on them if you're not careful."

Frank started to reply, but his throat felt suddenly dry. He glanced around to see if any of his men had heard Lowell. None were near, but anger overcame him nevertheless.

"I think you better change that stuff before it's too late," Lowell continued.

Frank nodded. "Yeah, I guess you're right," he said quickly and strode off, realizing he was abrupt but not caring. Alone, a few minutes later, he repeated to himself all the things he should have said. Why hadn't he told Lowell about his planning, how he'd figured that with each stack one skid higher he could get 10 per cent greater capacity? And with the wider skids barely over the aisle markers at each end of the row, he gained an extra row and another 10 per cent.

Now, in the light of Lowell's criticism, the whole plan seemed worthless. Why had he, Frank Shelton, a new foreman, taken the trouble to think up a new method? The zest was gone from the job and from the day. He boiled inside at the thought of Lowell. The guy always had to have things his way. He didn't want his men to use initiative. He had to be the powerful boss all the time, show his authority. No one's ideas were any good but his.

That evening Frank went home in a particularly bad mood, slammed the door as he entered the house, and yelled at his two boys. After dinner, when the children were in bed, his wife sat down beside him on the sofa.

"What's wrong, Frank? You've been so grumpy lately. Have I done something?"

"No, it's not you, Marge," he said. "It's just the pressure of the new job. More responsibility, more headaches. It's nothing, really. Forget it." He picked up the newspaper and buried himself in the sports section.

But a week later things were worse than before. This time his wife wouldn't let him off. "C'mon," she said. "Something's bothering you, and I have a right to know about it. Life's not very pleasant with you snarling at the family every night."

Frank found it difficult to express himself. "It's—well, tough to explain. I was tickled to death to get a chance at this job. Remember how I couldn't believe it at first? And I still think it's an opportunity. But doggone it, Marge, my new boss and I just don't hit it off."

"He's a general foreman, isn't he?"

"Yeah, it's that fellow Lowell—Jim Lowell. You met him at the company picnic last summer. He's a pain in the neck. Thinks he's a big shot."

"What does he do that you don't like? It seems to me I've heard some good things about him. Laura Kent's husband works for Jim Lowell, doesn't he?"

"Sure, Joe Kent's been a foreman for a couple of years."

"Well, Laura says that Joe thinks a lot of Lowell. He feels Lowell is tough, but at the same time he says he's fair. Laura was talking about

him just a couple of days ago."

Frank snorted. "Tough, huh? You can say that again. He's always ordering you around. Everything has to be done his way. If I come up with an idea, he has a better one. I'm fed up. One of these days I'll really tell him off."

"Yes, and you'll lose your job."

"It'll be worth it."

Marge sighed. "Well, it seems funny that Joe Kent can get along with Lowell and you can't. Maybe the trouble's with you. Did you ever stop

to consider that? You've had trouble with bosses before, remember?"

"O.K., O.K., so I'm the one to blame. How'd we get on this merry-go-round, anyway? Let's drop it." He sat the rest of the evening in sullen silence, feeling an extra discomfort from Marge's attitude.

Even the next day, driving to work, he was still mad at Marge. The questions she'd raised were disturbing. Why did Joe Kent get along with Lowell? What was different about him? And Marge's other comment: "Maybe the trouble's with you. . . . You've had trouble with bosses before, remember?" What did she mean by that, anyway?

By the time he pulled into the parking lot at the plant, he was more upset than ever. It was bad business, starting the day like this, he thought. That afternoon he went reluctantly to the weekly foreman's meeting. It was to be something special—some guy, an industrial psychologist, speaking on self-development. Holy smoke, he thought sourly, we've always got to develop ourselves. Push, push, push. No letup. It'd be great to be left alone for a change.

Frank didn't pay much attention when the plant manager got up to introduce the guest speaker. In fact, the speech was well under way when Frank was jarred to attention in the middle of a sentence. He straightened in his seat, tense, alert, listening.

". . . and we've been finding that this attitude toward authority can frequently be traced back through the years. A boy who had a dominating father, whom he resented, tends to grow up carrying this resentment toward anyone in a position to give him orders. In his mind, his boss becomes a father-figure. It isn't done consciously, of course. It's too deep-seated for that. And it's very difficult for a man to gain insight into himself in this matter. It's a conflict he's buried within himself.

"A person trained in human be-

havior detects it much more readily. He looks back over the individual's relationships with those people he had to obey. First his father, then his teachers, then his bosses. It's amazing how frequently a whole chain of resentment and hostility can be uncovered.

"The man who's caught in this web may well have had a rough time as a boy. That we have to admit. In most cases his father was too strong a personality. In a sense, the boy developed negative feelings that were appropriate at that time, but unfortunately he later carries these same feelings into new situations, with other authority figures. He's conditioned himself to respond negatively. And so often his negative feeling are no longer appropriate to the new situation.

"It sounds rather complicated, I know. Some of you may even say it's farfetched. But it's well established in the field of psychology. It's a hard thing for an individual to figure out if it exists in his own life. Often the services of a trained counselor are needed. But once a man gains insight, his day-to-day life usually starts to improve.

"I'm sure you can appreciate how such attitudes can make a man ineffective in a management job. He constantly hamstrings himself because he can't get along with his bosses. And the devil of it is, he blames them rather than himself . . ."

Frank couldn't remember afterward how he got out of the meeting. He only knew that he had to get away somewhere to think, so instead of getting into his car, he started to walk across town.

A stream of memories came flooding back. He saw himself, a boy of seven, rushing to the front door late one summer afternoon to greet his father coming home from work. It had rained that day, and he and another boy had built little boats to sail along the curb where the water flowed in the gutter. He was very proud of his boat. It was pointed in the front and had a row of nails around the edge, with string running along for a railing. In the middle, he had fixed a tall stack. He kept asking his mother, "When will Daddy get home?" He was sure Daddy would like the boat, too.

And then at last his father had come up the walk. Frank remembered how he had burst out the screen door, holding his boat up for inspection. "Look, Daddy," he exclaimed. "I built it all by myself."

His father took the boat and examined it. "What is it?" he asked.

"It's a boat, just like the real ones. See how I sawed the front end, and look at the smokestack."

His father eyed it critically. "I hope you didn't use my good saw. Why is the stack so crooked? Didn't you measure it? And those nails—they're all whopper-jawed." Frank suddenly understood why he had detested the phrase "whopper-jawed" ever since.

Something seemed to die in him as he stood before his father. The boat wasn't good. It couldn't be if his father said so. And his father was

still talking. "Now, if you had just sawed the stack off square and put it further forward in the center and . . ."

But Frank had lost interest. He took the boat from his father and went around to the back yard, where he could be alone. A great dislike of his father welled up inside him, and when he got out past the garage he couldn't hold the tears. Sobbing, he threw the boat as far as he could into the bushes. He never wanted to see it again.

Yes, maybe that was where it started. Other scenes with his father came tumbling back. The time when he was ten and made a racing car out of crates, using the wheels off his wagon. The time he stripped down his bicycle to grease the bearings and find out how the coaster brake worked. Always his father was giving advice, telling him how to make every move, pointing out a better method, never letting him learn through trial and error. If only he'd been allowed to make more mistakes!

Frank recalled how he'd gradually avoided sharing his ideas and his plans with his father for fear of criticism. Looking back on his boyhood, Frank realized that he had developed a habitual pattern of inner rebellion. It boiled in him almost constantly, because he couldn't give vent to his feelings. His father was too strong, too authoritative, to stand up to. He was like—yes, he was like the man who ran the meat market where Frank worked when he was 15. He got the job—it hurt to think of it now—through his father.

It was in his last year in junior high school. He was doing homework on the dining room table when his father came in and announced, "Well, you're a lucky fellow. I just came by the butcher's, and he says he needs a boy to work Saturdays. I told him you'd be interested. You always want more spending money, you know, and this is the answer. All you need to do is see him after school tomorrow and make it final. You can probably start this coming Saturday."

How could two men have been so much alike as his father and Mr. Morgan, the butcher? Even now, Frank thought, it was an amazing coincidence. Or was it?

Frank's job was to deliver orders on his bike and to clean up the market at the end of the day. He knew the neighborhood well, and the first day, as the orders were wrapped and names and addresses written on the heavy paper, Frank started to plan

his deliveries. He put several packages in the big wire basket on his bicycle. But Mr. Morgan pulled them out, issuing instructions in a loud voice before all the customers.

"You're not going way over on Fourteenth Street first, are you? And then back to Eleventh? That's no way to get the job done. Look, you have three orders close together on Maple Street. Take those first. That means you'll have to leave them on top of your basket. Got it? O.K., let's keep moving. No loafing along the way, remember!"

Frank remembered, dismally. He had hated the job from that moment, hated the job and Mr. Morgan too. Of all the bossy people, his father and the butcher were the worst, except for Lowell, his present boss. And come to think of it, the foreman he'd worked for when he got the maintenance job right out of high school—the one who wouldn't listen to anyone. He, too, had to have everything done his way.

Frank's reverie was broken when someone accidentally bumped into him. It wasn't until then that Frank realized he'd walked halfway across town. Across the street was a diner. He went in for a cup of coffee, feeling very tired.

Then he remembered that Marge would be wondering why he hadn't gotten home for dinner. He finished his coffee and phoned her.

"I've been worried," she said. Her voice was solicitous.

"I've been held up," he said. "Be home in a half-hour." Somehow he

"I know things haven't been going too smoothly here, but when the foreman started dressing that way, it struck you guys as *normal*?"

couldn't tell her what had happened.

On the bus ride back to his car, he looked around at the other passengers. How many of them, he wondered, had ever dragged out of the crevices of their past so many memories as he had in the last hour? It was hard work, unpleasant work. And for what? Would it really affect his life in any important way? All he knew at this point was a sort of quiet elation, like the satisfaction that comes from solving a difficult problem.

To play it safe, he told no one, not even Marge. He wanted to live with his new perspective for a while, experiment with it.

He had plenty of opportunity. There was some contact with Lowell almost every day. And Frank watched himself like a hawk during these encounters, part of him standing apart, observing what went on. It wasn't always easy. Once he had to go to Lowell's office to discuss the handling of a rush shipment that required considerable overtime. Frank had mapped out what he thought was a workable plan for loading several extra cars per shift.

"I have three men lined up, and we'll take the fork trucks off the Prescott job. And then I figured we'd—"

But Lowell interrupted. "You've forgotten, Frank, that the Prescott shipment has high priority, too. We can't let it bog down completely. Now suppose you transferred only two of the trucks—"

Frank started to object. Then he caught himself, and tried to listen with an open mind while Lowell finished outlining an alternate plan. The new plan made sense. Frank had to admit that to himself. As he went back to his department he asked himself, "Why should Lowell's ideas be so hard to swallow? We're both here to get a job done, not to see who

can do it his way all the time. Besides, I ought to have enough sense to profit from his greater experience."

As a result of the rush shipment and a couple of other incidents over the next month, Frank began to sense a favorable change in himself. Slowly he saw Lowell and their relationship in a new light. He sized up Lowell's purpose in talking to him each time, his tone of voice, his use of criticism. It hadn't been too bad. Actually, most of their talks had been matter-of-fact progress discussions. Lowell had asked about the state of various jobs, made a suggestion or two. Twice he'd been mildly critical of Frank's handling of certain orders, but he'd

added, "I couldn't expect you to know all these things yet. It'll come." And on another occasion he'd even praised Frank for diplomatic handling of an irate trucker. Not much praise. Lowell never gushed, but a little praise from him meant more than a pat on the back from another kind of man. Lowell expected good performance, but as Joe Kent had said, he was fair.

Frank was so busy sizing up his relations with his boss that he overlooked the change that was taking place in his attitude toward his family. Marge had carefully avoided discussing his job after their unpleasant conversation of a month before. But one night, after he'd played with the boys and their electric trains, and then told them a story as he tucked them in bed, she said, "It's nice to see you feeling so good lately. Your work must be going better. Is Jim Lowell treating you like a human being?"

"Oh, he's not such a bad guy," Frank said. ◆

"Have you worked with this new alloy yet? Man, it's light!"

THEY SHOW THEIR BADGES

Every day hundreds of types like these pour through plant gates. Recognize anyone you know?

Mysterious Type

Playful Type

The Bluffer

Casual Type

Treasure Hunter

Under the Wire

Timid Type

Look, No Hands

The Clutcher

Contributed by *Sentry*, of General Plant Protection Co., Los Angeles, with permission of *Aireporter*, the Garrett Corp.

John Tirabassi

...Foreman

An on-the-spot picture story of how one foreman spends his day

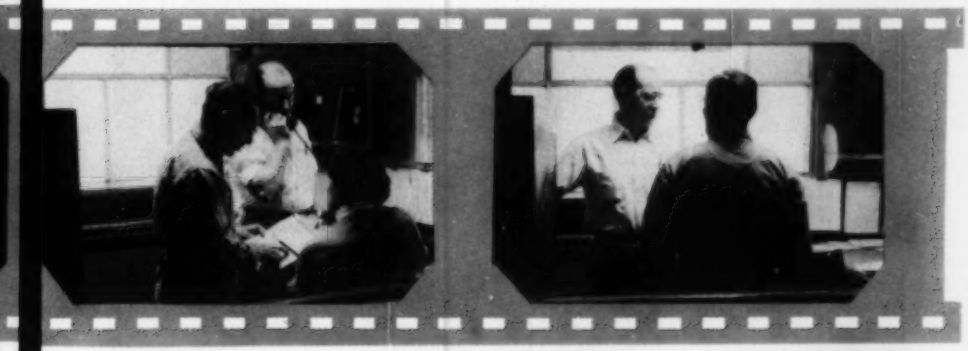
MAKING Jello is a cinch for the housewife. She merely adds hot water, stirs, and puts it in the refrigerator. But for John Tirabassi, making Jello means supervising 40 people, mostly women, and keeping up with 21 packaging machines, 21 mixing machines, 2 case sealers, 3 case packers, and an automatic scale. It also means solving all the problems that come up in his department.

It's John's job to supervise the mixing and packaging of dry ingredients for Jello and pudding operations at Franklin Baker Division of General Foods Corporation, in Hoboken, New Jersey. The plant has approximately 500 production workers and 200 office employees. John's Jello operation is one of the most complex in the whole plant. Every day, any of the 48 complicated machines can create problems, and his 40 people, of course, have their problems, too. To help him out, there is one forelady, who reports to him.

John is 39, married, and has two children, a boy and a girl. He lives in nearby Jersey City and walks to work in 20 minutes—on nice mornings. In bad weather he takes a bus. He's known as "Johnny" to most of his department, and despite his problems, he still manages to smile a lot. He's the kind of guy you know is a good father as well as a good boss.

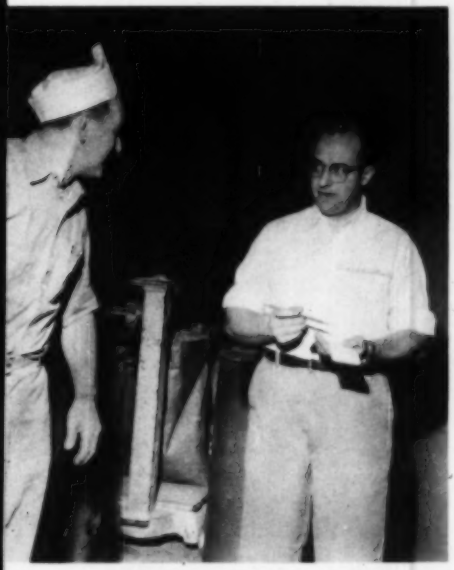
John started with Franklin Baker in 1934, as a plant laborer. He became a machine tender on several different products and later was a service man in the packing department. Early in 1948, he was made a group leader, and later that year he advanced to night-shift foreman. He's been a day-shift foreman for four years.

The day SUPERVISORY MANAGEMENT checked John was a fairly typical one —problems, one right after the other. One pudding packaging machine was down for repairs, a new Jello packaging machine was being installed, schedules had to be ironed out, changes had to be made. Inspection trips kept him traveling. It was a busy day.



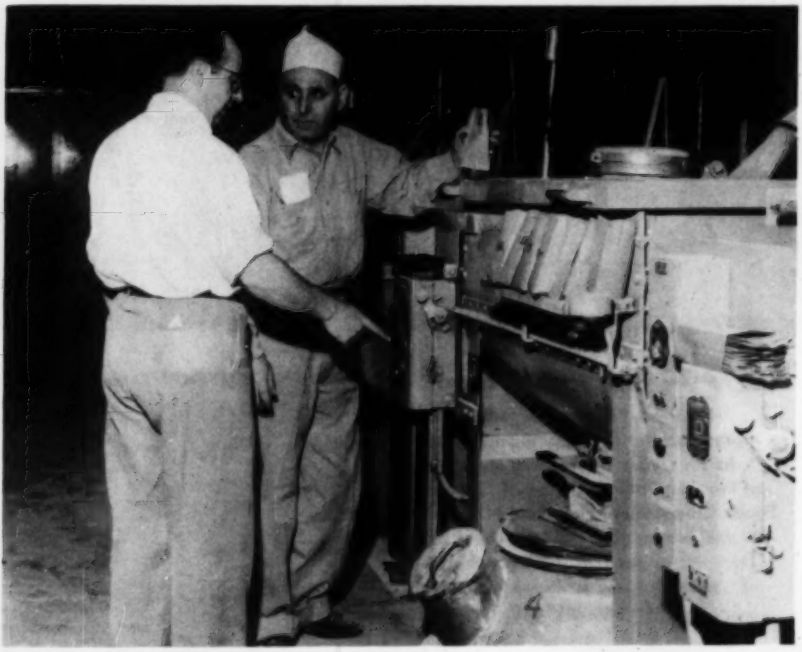
6:28 A.M. Enough sugar?

A half-hour before the shift starts, foreman John Tirabassi is on the job. As supervisor of the Jello operation at Franklin Baker Division of General Foods Corporation, Hoboken, N. J., his first morning routine is to check the sugar bins. He finds there's enough to cover his shift but not enough for the second.



And what else?

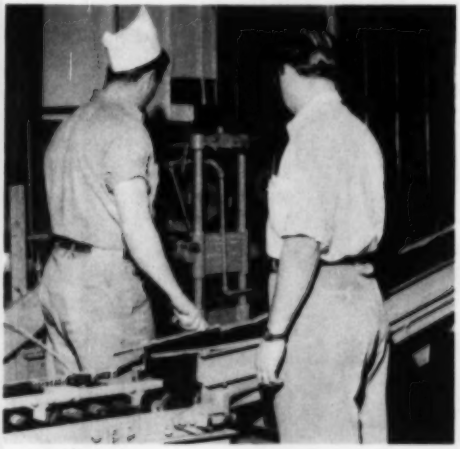
Jotting down a reminder about ordering more sugar, John asks the batching men if there's anything else they need. He uses his notes for the requisitions he writes at the end of his morning tour.



Mixers come next . . . John stops by the mixing department to make sure everything is set for the day's operations. The small paper bags, like the one being held by the mixer operator, contain premeasured quantities of coloring and flavoring, which are added at this stage.

7:02 A.M.
Final check

Morning tour ends when John inspects the carton-sealing section, where finished cases of Jello and Jello Pudding are sealed and shipped. While making his rounds, his assistant has seen to it that packaging-machine operators are set for the day.



Talks with his boss . . . Catching his boss, Ivar Ness, product supervisor, on the run, John has a brief discussion about the day's schedule. Since both men are out in the plant much of the time, these on-the-run conferences are common.

7:40 A.M. Packaging machine on the bum . . . One of the pudding packaging machines is down for repairs. A new part had been put in and the machine was ready to start, but one of the feed augers was frozen. John checks with the mechanic.

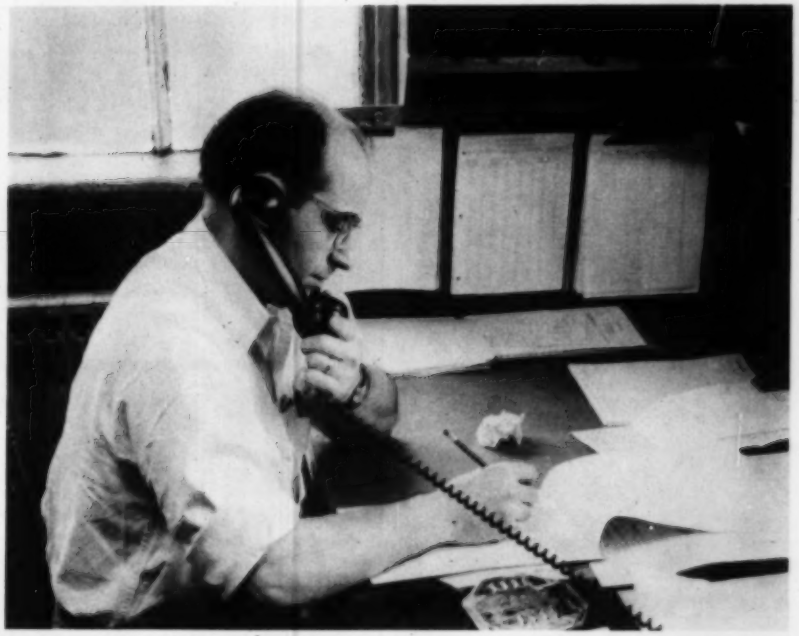
Getting the facts . . . John goes over the packaging machine himself, so that he can make out an accurate job order for the maintenance department. He is thoroughly familiar with all the machines in his department.

This is what we need

Having made out the job order for the packaging machine, John takes it to the maintenance department. He and the maintenance foreman talk over the repairs and scheduling. Some questions come up, so John has to check the machine again.

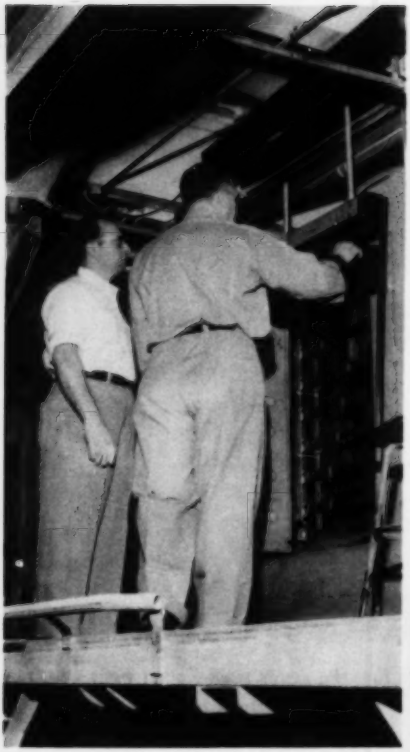
Another look

Getting the information for maintenance, John gives the packaging machine another thorough going over.



Say, Charlie, on that . . . With all the facts he needs, John calls the maintenance department to give them the dope.

9:45 A.M. Efficiency report: 90 per cent is par . . . After the morning rush is over, John settles down in his office to make out his daily efficiency reports. The reports are broken down by machine, operator, line, and shift. Ninety per cent is considered par for the course. If it's less than that, there has to be a reason—and it has to be in the report. In making out the report, John confers with his assistant.

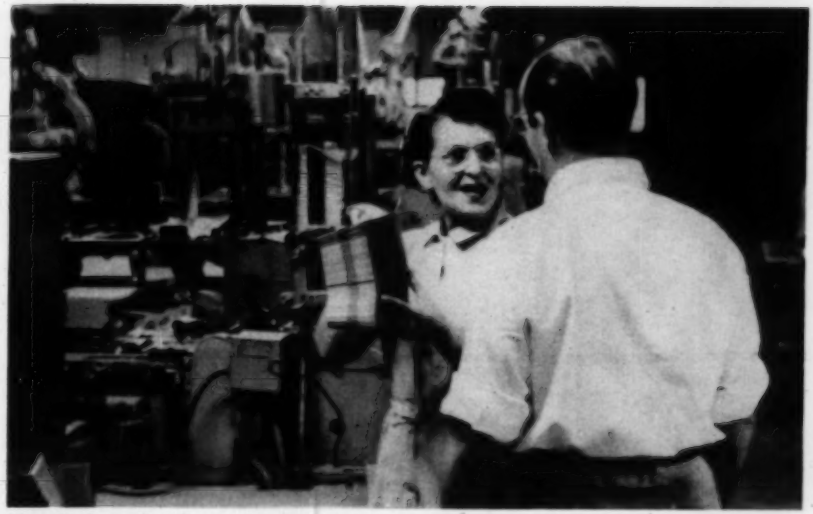


More trouble

John gets the word that something's wrong with the automatic scale unit that weighs the ingredients and loads them into traveling bins. He makes an on-the-spot check to make sure the machine is being adjusted correctly.

Paper test

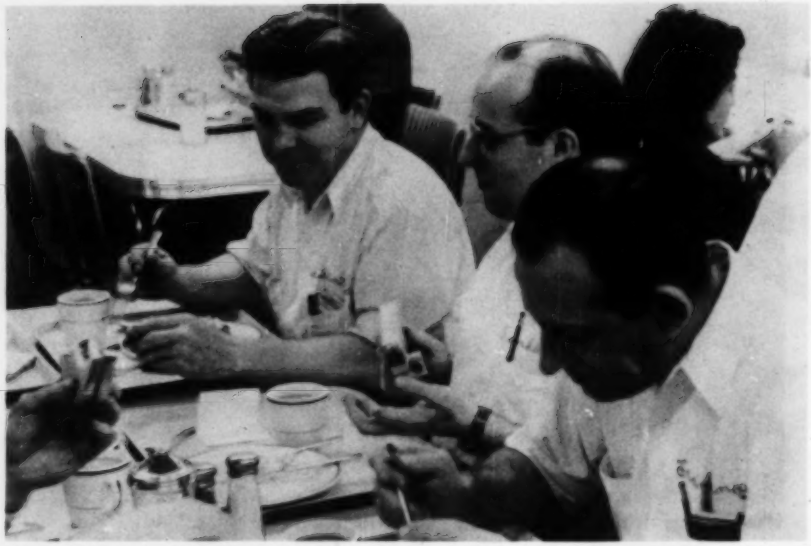
The paper supply for the inner satchels of Jello is being changed. Roll after roll of new paper is shipped into the department and has to be tested on the packaging machines. John runs a test on the latest roll, checking it for grain, resistance to creasing, and sealing. He has to make out a report on every test.



How's it going? . . . A packaging-machine operator, with a load of cartons, stops to ask about the paper test. John briefs her, asks her how she's making out. "Everything's going smoothly," she says.

Another headache

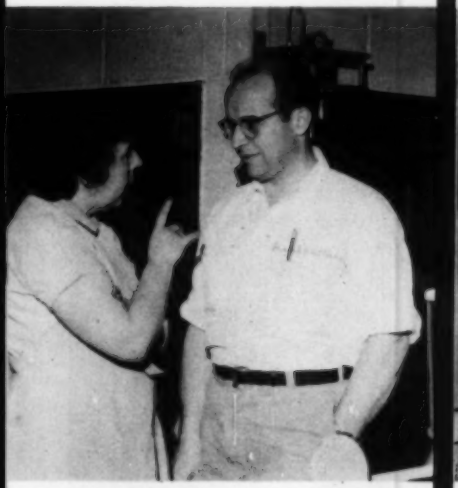
A new machine has been installed on the Jello packaging line and is being prepared for operation by the standard machine timing and adjustment crew. John is discussing how soon the machine will be ready.



1:50 P.M. Semi-relaxed smoke . . . Lunch over, John takes time for a quick smoke while talking shop with other supervisors.

2:30 P.M. Thrashing it out . . . John and his boss, Ivar Ness, meet with Bill Delaney, plant superintendent, to review some plant problems. One of the hot topics is downtime on the pudding packaging machine.

Need a repair crew . . . The pudding packaging machine still isn't in operation, so John checks schedules of mechanics in maintenance department to arrange for a repair crew for the second shift.

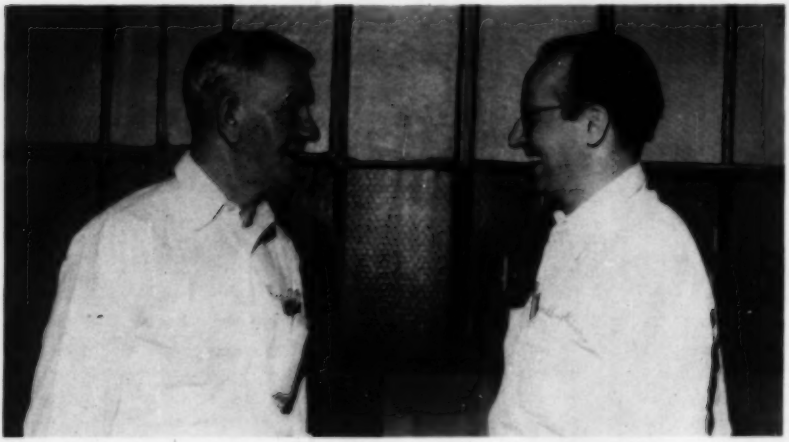


How are we going to do this? . . . An employee seeks advice on how to handle a change in her schedule. John listens, makes a suggestion on how the problem can be handled.

How does this look? . . . John has picked the crew for Saturday work, and is informing the union steward. The plant has two unions, but John's department is represented by only one of them.

Why don't we try it this way? . . . John talks over a problem about the sealing operation on one of the Jello packaging machines with a mechanic.

3:05 P.M. Briefing the night foreman . . . A quick joke, and then John gives Charlie Gilbert the lowdown on how the operation is going. He briefs him thoroughly on the pudding packaging machine and the new Jello packaging unit.



4:05 P.M. Home—by bus today . . . Having changed to his street clothes, John heads for the nearby bus stop. His day is over as far as work is concerned, but his mind is still filled with the everyday things of his job—problems.

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Memo to the Office Supervisor:

ON CUTTING COSTS AND STREAMLINING OPERATIONS

THERE'S nothing like day-in, day-out office routine to stifle imagination. A supervisor sees things being done in a certain way for a long period of time, and inevitably tends to accept the current method as being the best. The only way to get a new approach to established procedures is to back off and eye them as objectively as possible. That's the purpose of the following checklist—to help the office supervisor examine each function in his department to see if there isn't a more efficient, more economical way to handle them.

MANPOWER

1. Is anyone else doing the same or similar work? Is this duplication necessary?

2. Is the standard of quality higher than the use justifies?

3. Is any work being performed manually that can better be done by machines?

4. Can reports, memoranda, or letters be shortened to reduce dictating, typing, or reading time?

5. Can some part of the work be done by any employee in a lower salary grade?

6. Which approvals and other decisions can be delegated to subordinates?

PROCEDURES

7. Are all reviews, clearances, checks, and other controls really necessary?

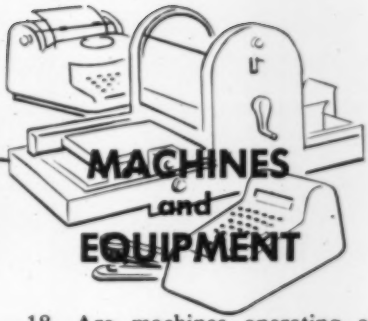
8. Are all parts of the procedure really essential for a satisfactory final result? Can any routing steps be eliminated?

9. Are there bottlenecks to be corrected?

10. Can the flow of work be regulated to eliminate "peak periods"?

11. Need the papers be filed? For how long?

12. Can spot checks take the place of reviewing all cases in detail?



18. Are machines operating at maximum capacity? If not, can use be made of the idle time?

19. Are machines and equipment "prepositioned" at the best places in the proper work area?

20. Can the mimeograph or other duplicating processes be used more economically in place of the typewriter?

13. Can less-expensive or less-scarce supplies be substituted?

14. Can any forms be eliminated, combined, or reduced in length? Is every item essential?

15. Can forms be better designed to make them easier to fill out and process?

16. Can "setups" be prepared in advance to save time?

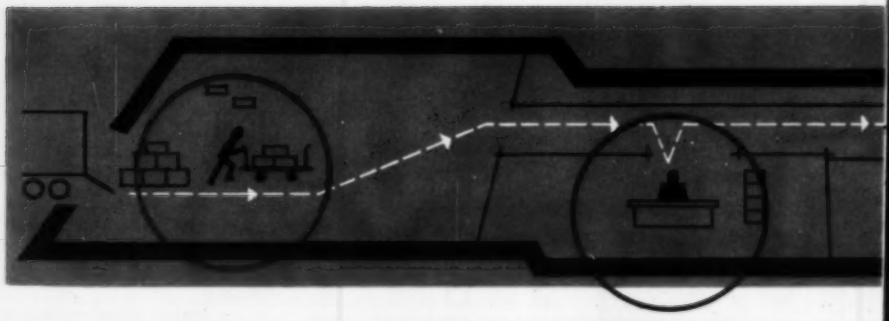
17. Can form letters or preprinted material be utilized to reduce work and cost?

21. Are desks and other equipment arranged to avoid unnecessary steps?

22. Is available space being used to the best advantage?

23. Is it often necessary to leave the workplace to go after information, equipment, or materials? If so, can such material be made more accessible? ◆

Adapted from the U. S. Department of Health, Education and Welfare booklet *Suggestions for Savings.*



TROUBLE SPOTS IN

How can you tell whether your materials handling system is as good as it should be? How can you find the areas most in need of attention? Because you know your plant so well, it may be difficult to spot such areas. For example, people who live near a railroad soon become so accustomed to the sound of trains that they no longer notice it. The same thing can happen to a supervisor who is so used to seeing materials handling operations performed in a certain way that it's hard for him to see any flaws in the method that's being used. But here's a checklist that may help jog your thinking:

Examining Plant Records

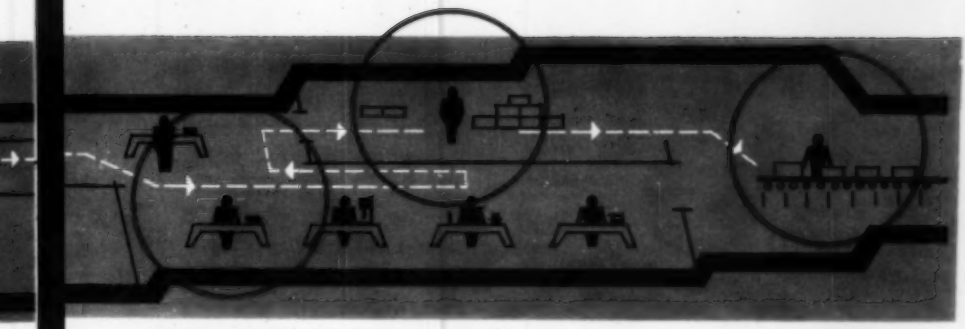
How much are you paying for demurrage (the charge made by railroads when freight cars are held too long)?

What are you spending for maintenance and repair of handling equipment?

What is the cost of labor for materials handling in your plant or department? How many men are employed full time and part time in moving materials? What are their labor grades (pay rates)? Lack of information on these points is even more serious than a high labor-cost figure. If records don't give the answers, the first step should be a change in the record-keeping system.

How much rework and scrap are traceable to faulty materials handling —dropping, bumping, and so on? (Inspection records should show type and cost of rejects as well as quantity.)

Are materials ever damaged by rain and weather because they aren't



MATERIALS HANDLING

brought inside soon enough or because there isn't room for them?

Chances are, finding answers to these questions will point up a good many areas where materials handling attention is needed.

Now, take a walk through your plant—from receiving all the way to shipping—and ask yourself questions like these:

In the Receiving Department

Are any materials unloaded by hand?

Are materials standing around—piled up in the yard or on the receiving platform—waiting to be moved into the plant? How long have they been there? How frequently does this occur?

Do men stand around idle a good deal of the time, waiting for the "big" jobs? Would it be cheaper in the long run to buy such equipment as cardumpers and portable conveyors to eliminate the need for extra men?

Are materials moved more than once in receiving? Are they unloaded in the yard, stacked, then moved to a receiving platform before finally moving into the plant? Every extra handling operation wastes time and effort.

In Production Areas

Do skilled workers handle materials or heavy dies? That's using expensive labor for an unskilled—and often unnecessary—manual job.

Are delicate parts frequently damaged in transit? Care in handling, plus use of special racks and bins,

Reprinted from *Improving Materials Handling in Small Plants*, Small Defense Plants Administration.

will help eliminate this needless expense.

Is the production area cluttered with parts and materials that are to be used later, or to be moved to the next operation, or to be discarded? This practice not only interferes with production but also invites damage.

"Live storage" conveyors and tiering trays can do a lot to relieve the situation. Better scheduling of materials handling can help, too.

Is every part, pallet load, or tote box clearly (and permanently) labeled with tags that show where they have come from and where they are going, to what order they apply, and what special handling is required? Doing this prevents losses, misdelivery, and reduces extra handling.

If you have a multistory plant, and elevators are used to move materials between floors, how long do materials handlers have to wait for an elevator? Multiply that figure by the 20 or 50 times a day materials handlers use the elevator, and you'll see how much time is being wasted.

How are materials moved from one machine to another, and how are they lifted to working level? If your production area is not sprinkled with small chutes, conveyors, lifting devices, and the like, you're probably losing an opportunity to speed production and cut costs.

Is scrap disposed of mechanically —with conveyors taking it right from the source to storage bins? This method not only saves handling costs but also safeguards segregation procedures and brings a greater return on scrap sales.

Are aisles clear, smoothly paved, and well lighted, so that traffic can flow freely and safely?

Do tote boxes, bar stock, or parts of machines stick out into aisles? At best, they'll slow traffic; at worst, constitute a serious safety hazard.

In Storage Areas

Are storage areas well lighted to permit rapid movement of equipment and easy reading of identification information? Good lighting is just as important here as in production areas.

Are storage areas marked off in

sections, and are the sections numbered or lettered for identification?

Is a record kept of what is stored in each area, so that parts and products can be located rapidly and easily?

Are floor and ceiling load limits prominently displayed, so that floors and ceiling-mounted conveyors are not overloaded? This, too, is just as important in storage as in production areas.

Are products stored in the form that is easiest to handle, and in the same unit as the one in which they will be shipped? For example, if orders generally call for a dozen items, are they packed and stored by the dozen?

Is full use made of overhead space by stacking pallets three and four high? Are racks used that go up to the maximum height that can be reached by materials handling equipment?

Has traffic movement in storage areas been studied to work out the shortest routes? Are items generally used or ordered together placed in areas next to each other?

Are aisles wide enough to permit free movement of handling equipment?

Is the floor kept in good shape at all times?

Are storage areas located as close as possible to the production areas they serve? Establishing small "branch" storage areas for in-process parts can save a good many miles of travel in a year—and more than pay for any extra cost involved in establishing them.

In the Shipping Department

How are parts moved from storage to shipping? Would installation of conveyors or use of power trucks speed and simplify the job?

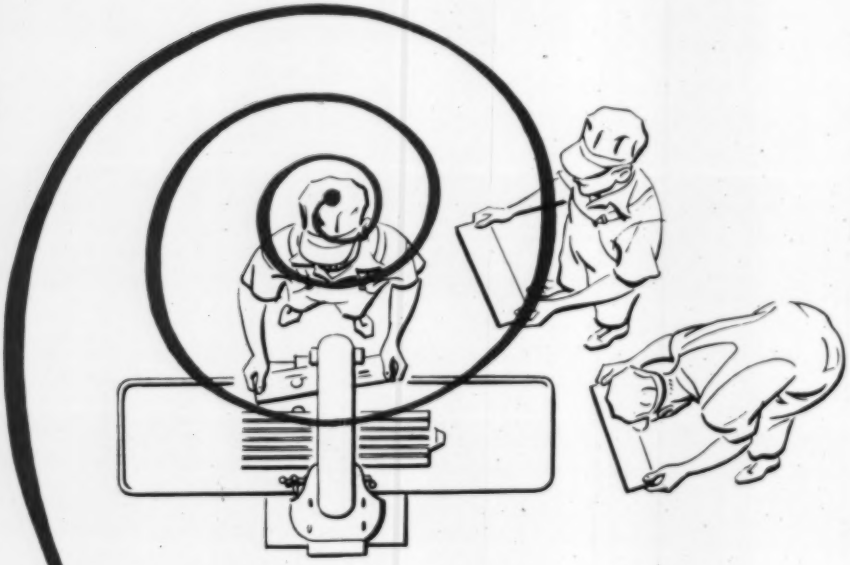
Are outgoing products ready when trucks and railroad cars arrive, but not ready so far in advance that they run the risk of damage or deterioration?

Is the shipping area cluttered with parts and packages waiting to be moved? That's a sure sign something is wrong, an indication that planning and scheduling need close attention.

Is every package clearly labeled as to destination and method of shipment?

Are portable conveyors or mobile industrial vehicles used to load freight cars and trucks?

Are men standing around waiting for something to do—or working their heads off to meet an unexpected deadline? Better planning and better handling methods mean better use of manpower and fewer "emergencies." ◆



accidents start inside a man

Emotions play a part in 95 per cent of all accidents. Most of them could be prevented, and the supervisor can help

THERE'S a much closer connection between an unpaid grocery bill and a mangled hand than most people realize. In the same way, there may be a tie-in between an employee's argument with his girl friend and the fact that he breaks his leg while at work the next morning.

It's well established that emotions rather than mechanical defects are the major factor in causing accidents. One consultant even goes so far as to estimate that human factors are responsible for 95 per cent of all accidents, and that eight out of ten of these mishaps could have been prevented.

When a man puts on overalls and reports for work, he doesn't leave his emotions at home. He brings to

the job his fears, worries, loves, hates, enthusiasms, and jealousies. These emotions influence the way he thinks and what he does, and may even affect his physical coordination—an important factor in why a man has an accident.

Because of this, it's important for the safety-conscious supervisor to know how his people are feeling. It's up to him to spot the worker who may be so upset emotionally that he's ripe for an accident, and then try to do whatever he can to remedy the problem.

One supervisor's solution

Take the case of George Fisher. George was a press operator, and records showed that at fairly regular intervals he would be involved in some type of minor accident. None were very serious, but the fact that they occurred regularly made it a serious problem. George's supervisor checked into the situation. He found George was thoroughly experienced in the type of work he was doing and had a good efficiency rating. The supervisor figured that it wasn't unfamiliarity with the work or lack of skill that was causing the trouble. Something else must be wrong.

The supervisor called George into his office to talk over the problem. When George was told the company was disturbed about his accident record, he went on the defensive.

"I never lose much time on those little things," he said, "and I turn out as much work as anybody in the department. So what's the gripe?"

"I'm not saying you're not a good man, George. In fact, you're one of the best men we have," the supervisor said. "But any one of these little accidents could have put you out of commission for a long time—or even have killed you. George, I'm going to level with you. It's getting too dangerous to keep you on the job—dangerous to you. Is something wrong?"

The supervisor continued his questions, gently investigating every possibility. Finally, George admitted that he had recently refurnished several rooms in his home with furniture bought on the installment plan, and now the unpaid bills were rolling in and he was having trouble meeting his expenses. He said he was so worried about where he was going to get the money that he found it hard to keep his mind on the job.

The supervisor called on the personnel department and the credit union, and helped George straighten out his finances. Almost immediately, George's accident rate dropped. He just didn't seem to be having accidents any more.

Emotions affect the body

Emotional pressures that may cause a man to have an accident usually work in two ways: they hinder his physical coordination, and they make him inattentive.

When something is bothering a man, his muscular responses aren't as quick as they would normally be.

Adapted from *You Are Management*, with permission of The Mead Corporation.

He isn't as fast on his feet or as agile as usual. Whatever is distracting him may slow him down just enough so that he doesn't move his hands or his feet fast enough to avoid getting hurt. Perhaps he is slow in gaining his balance or shifting his weight while lifting something. As a result, he may suffer an internal injury.

When a man is worried about problems outside work, his job loses its importance to him. He's not as conscious of the dangers in the work he's doing as he would normally be. He just isn't paying attention. This makes him dangerous to himself and to others. Despite accident-prevention programs, safety rules and regulations, the man who's upset is inclined to be accident prone.

A famous analyst once pointed out that you can build a guardrail around a band saw, but you can't fence off a man's mental attitude. Even if he can't get his finger into the saw, he can still drop whatever he's sawing on his foot.

Clues to look for

It's the supervisor's job to detect as soon as possible any indication that one of his workers is unduly worried. Attitudes, facial expressions, abnormal reactions, the way a worker moves around on the job, are just a few of the clues a supervisor can use to tell whether an employee is upset. Of course, an almost certain indicator that something is wrong is when an employee has a series of minor accidents. In cases like these, it's the supervisor's responsibility to find the cause and give the individual extra attention before another accident occurs.

Studies have been made to find out what kind of people seem to have the most accidents. Figures indicate that about 25 per cent of employees cause about 75 per cent of the accidents. One taxi firm investigated its own drivers—the ones who had high accident rates—and found that most of them fit the following pattern:

1. In school, their academic standing was average; they were inclined toward truancy and left school to seek independence.

2. Their work record is filled with short-time jobs, and they made poor adjustments to previous employers.

3. They are easily distracted while driving. They are annoyed by other drivers. They criticize their own mistakes in others. They honk their horns often and race away from stop lights. They have marked mechanical interest, but no concern over the mechanical limitations of their taxis. Their cars are untidy, dirty, and have flashy accessories. They are discourteous to passengers.

4. They dislike discipline, hate routine, and have a strong desire to be their own boss. They consider only the immediate future and the satisfactions of each day.

5. They are impulsive—act on the spur of the moment.

6. They have an unusual amount of resentment against authority.

7. They want to be pampered.

8. They avoid responsibility.

When supervisors are asked what

they regard as their main responsibility, the usual answer is "Getting out the work." That's why anything that interferes with the production flow is one of the supervisor's prime concerns. A major item in this area is safety, since accidents can slow down production faster, and sometimes more seriously, than anything else. Machines can be damaged, and the services of key personnel may be lost.

Safety habits have to be learned—which means they have to be taught. Safety training should be an integral part of job instruction, and in teaching a man how to do a job, a supervisor should be sure to show him the safe way of doing it. If an employee picks up unsafe habits in learning the job and keeps repeating them, the law of averages will catch up sooner or later and there will be an accident.

If mechanical hazards are not taken care of, the same law of averages will work, and there will be another black mark on the department's safety record. It's the supervisor's job to see that safe working conditions are maintained. If he does that, he has five per cent of the problem licked. The other 95 per cent depends on how well he knows his people and how closely he watches the underlying causes of accidents—emotions. ◆

"Safety Committee ought to be happy—he was wearing his hard hat."

When Supervisors' Wives Start Talking . . .

A management consultant talked to employees' wives at one company, and this is what they had to say about their husbands

It all started innocently enough. Line Material Company, a manufacturer of electrical equipment, called in management consultant Dr. Louis Hackemann to run a human relations course for its supervisors.

The program was a smash hit. There was a lot of talk about it both at home and at work, and it didn't take long for the wives of L-M employees to get interested. Working on the angle that behind every good man there's a good woman, the wives convinced the company that a similar human relations course should be held for them.

The sessions for the wives turned out to be equally successful. But more important was what management consultant Hackemann learned about the wives – particularly what bothers them about their husbands.

From unsigned questionnaires filled out by more than 100 wives, here's what concerns them most about their husbands:

Complaint	Number
Worrying, tension, unable to relax	38
Takes work too seriously	17
Health	13
Emotions and emotional problems	9
Lack of understanding of others	8
Domineering and bossy at home	5
Takes job home	4
Works too long hours	4
Lacks hobbies and outside interests	4
Manners and personal appearance	4

Asked what upset them most about their husbands as social beings, the wives listed:

Complaint	Number
Unwillingness or inability to discuss things with wife	23
Doesn't take part in family activities	20
Relationship with wife—common interests and marital relationships	18
Poor handling of children	16
Doesn't show appreciation or give recognition to wife	12
Avoids social contacts	9
Doesn't know how to handle money	5

Another tipoff on what bothers wives showed up in the answers to the question, "What would you most like to talk over with a counselor if you had the opportunity?":

Complaint	Number
How to raise and understand children	40
Personal problems and frustrations	34
How to gain insight and self-understanding	24
How to help husband	21
Self-improvement	19
How to handle money	10
How to help others	9
Family relationships and problems	8
Behavior	6
Marital adjustment	5
What's expected of a wife	5

In talking with the women and in going over the questionnaires, Dr. Hackemann saw that there was a definite pattern to the frustrations experienced by wives. Generally, women with children have more frustrations; also wives of men in management positions have more problems as their husbands' job responsibilities increase.

Wives living in small plant communities seem to experience fewer frustrations—possibly because social and religious activities are more often centered in the home in small communities.

On the problem of the husband who comes home "tensed up," Dr. Hackemann says a wife should not counter this tension with tension of her own. A lot of wives, he says, forget that their husbands have had enough of work when the day is over. What they are looking for in their wives is escape from their work.

The way a wife can best help her husband get ahead is to show him, as tactfully as possible, how he appears to others. In this way he has a chance to correct his shortcomings and build up his strong points. Most important, she should have a strong faith in his ability to succeed. ◆

EDITOR'S NOTE: When Employers Mutuals of Wausau, Wisconsin, decided to "automate" some of its departments, the employees were given the lowdown in the company house organ. In the January, 1956, issue of Coverage, the employee publication, the following article appeared. It's an excellent example of sound communications in gaining employee acceptance of a new procedure. It's also a good illustration of what integrated data processing is all about.

THIS is not the story of new office machines, of another batch of new forms, or a new set of procedures. It's the story of all these and how Employers Mutuals is pioneering in a way that results in improved policyholder service. It's a report on a development still under way in which many more changes will be reported in the years ahead. It's about "integrated data processing," a three-word label for what the company is doing to improve the processing of the mountainous quantities of figures and facts it needs to do business.

Newcomers in the insurance business generally are amazed by what goes on when an application for insurance is accepted. Naturally they expect a policy to be prepared and sent out to policyholders, but what astounds them is that this is only the first step, important as it is, in the work that has to be done in the office when John Q. Jones, of East Warwick, buys an auto policy.

The one copy of the declaration —the typed sheet with the name, limits of coverage, premium, and all the other information on it—which goes to the policyholder with his printed policy seems almost incidental when so many other copies are being run off the "mat" and sent around the company. When we see what happens after the data from one of the copies, the brief, is punched into IBM cards that only machines can read, and how fast the information on thousands of these cards can be compiled and used once that step is taken, we recognize that data processing is one of the central problems of the business.

If you're going to have your business records in machine language for both statistical and operating purposes, it obviously should be translated as soon, as rapidly, and as accurately as possible into that language.

Machines not only work faster than human beings but they work differently. Routines and forms appropriate for the human hand, eye, and brain need to be changed all around when machines do the work. Months and years of planning may be necessary to break the job down to its elements and tailor the procedures and forms to present machines' capacities and the probable future line of their development.

If the difficulties aren't evident to the newcomer, neither are some of the benefits gained—uniform and simplified forms, to mention one. Recent improvements, for example, have produced a more attractive policy with a declaration from which much "office only" information is eliminated.

A system for billing policyholders by punch-card equipment was developed in 1951. In 1953, premium coding was begun in the branches. In 1954, punch-card claim checks were introduced.

In December, 1955, Employers Mutuals took the latest in a series of steps forward in translating information into machine language at an earlier point.

Now when a policy declaration

As part of its switch to integrated data processing, Wausau installed typewriter-tape machines which produce perforated tapes while the original paper is being typed. The tape reproduces the typed information.

mat is typed at the home office on an IBM 884 typewriter-tape machine, a tape comes curling out punched full of holes which guide automatic IBM card-punching equipment in reproducing the vital facts and figures. Typing for one policy takes about three feet of tape. Yet the tape-to-card converter, known as an 046, can put the information on a card or on several cards at the rate of one card every four seconds.

Three of these typewriter-tape-punching machines arrived in December, and 14 more are coming. At the outset, equipment of this type will be used only at the home office. What will be made of this equipment outside Wausau depends on how the machines can be kept busy. Obviously an office issuing only a modest number of policies daily would have a machine idle most of the time, although the work a typewriter-tape-punch machine can do is by no means limited to policywriting.

What will integrated data processing mean to Employers Mutuals people? How will it change their work and their jobs?

The effectiveness with which the company processes its financial and statistical information is bound to have a bearing on how Employers

Mutuals fares in competition. Costs of doing this work are a major part of operating expenses. Savings and improvements in speed and capacity affect everyone directly and indirectly.

While many companies can obtain the new machines, there's far more to integrated data processing than trucking in a new machine and pushing the "start" button. All the work the company is doing in working out new concepts and procedures is expected to pay off competitively.

Comparatively few will find their work materially changed, and these individuals are being informed of the plans in advance. Transfers, job description changes, and training are expected to take care of the instances where old jobs actually cease to exist. Some jobs will be up-graded—made more challenging and interesting as a result.

To many others, the changes are, on the surface, no more than getting used to new forms. For example, the salesman has to get acquainted with a new application blank. It was revised to correspond to the new declaration form, making the typist's work easier, and to reduce possibilities of error in transcribing. Technical bulletins have already been issued by a number of departments to explain changes of this kind.

Add it all up and you can say that integrated data processing means a great deal to all Employers Mutuals people and can be expected to mean even more in the future. ◆

This tape-to-card converter receives the perforated tape from the typewriter-tape machine (above, left) and turns out IBM cards punched to conform with the instructions that are contained on the perforated tape.

Foremen and

1. Recognition...

FOREMAN SPEAKING: We recognize stewards as representatives of the union and know that it's their job to see that the company lives up to the labor agreement. We know it's their job to speak for employees and to help them in presenting and settling grievances.

STEWARD SPEAKING: We recognize that foremen have important responsibilities. We know that it's not easy to keep production running smoothly all the time. What we want from the foreman is proper instruction and fair play in running the department.

2. Personal Complaints...

FOREMAN: Employees should feel free to discuss any complaint with me – either personal or routine. Any decision will, of course, be in line with labor agreements.

STEWARD: Whenever the complaint concerns wages, hours, or working conditions, which is alleged to be in violation of the labor agreement, I have a right to be present.

Stewards

An on-the-job guide that is designed to help foremen and stewards in their daily work relations

3. Settle grievances at first step...

FOREMAN: Top management wants me to develop and maintain the best possible working relationship with my men, so that if a complaint comes up, it can be settled at the foreman-steward level.

STEWARD: Top union executives have instructed me to exercise care and patience in analyzing the merits of employee grievances and to avoid appealing a grievance unless evidence proves that the company's answer appears to be unsupported by the facts.

4. Get the facts...

FOREMAN: Assembling the facts, investigating a complaint, and preparing the company's answer take time. Pressure for "quick" answers may be unfair to all concerned—particularly the employee.

STEWARD: I won't present a case unless I have checked the facts and believe it has merit. I won't hesitate to refuse to process a grievance merely because of pressure or the personalities involved.

Adapted with permission of the Pittsburgh Plate Glass Company.

5. Weigh the evidence...

FOREMAN: After the facts in a case have been determined, the principles must be weighed. Management's answer will be fair and equitable and, we hope, mutually satisfactory to both sides. I'll pass on the company's decision to you and answer any questions that you have about it.

STEWARD: A grievance must be settled on the merits of the case, and personal feelings won't influence my judgment. In all fairness to the employee, I won't give him false hopes or doubts on the outcome of his case.

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6. Prompt decision...

FOREMAN: No purpose is served in holding up an answer once a company decision has been made. I'll notify you as soon as there is something to say.

STEWARD: Delay on either side is frustrating. Therefore, I will let you know as soon as possible whether or not the company decision is acceptable.

7. No private deals...

FOREMAN: If you think a change in labor relations procedure or practice is necessary, I will be glad to talk to you and make a recommendation to the plant manager. This way everything is open and aboveboard.

STEWARD: I realize that labor and personnel policies have to be applied on a plant-wide basis. Accordingly, I will avoid trying to obtain any special privilege for any particular individual.

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8. Steward off the job...

FOREMAN: Whenever you need to leave your job to investigate an employee grievance, arrangements must first be made to cover your job. I'll assign someone as quickly as I can.

STEWARD: Under the labor agreement I have the right to ask for time off my job to handle grievances, and even though some matters are urgent, I shall give reasonable notice and not stay away any longer than necessary.

9. Always use the grievance procedure...

FOREMAN: There is no excuse for an employee short-circuiting the grievance procedure by taking direct action. I shall not say or do anything which might provoke an employee into ignoring the grievance machinery.

STEWARD: I'll urge all employees to follow the grievance procedure when they feel they have a grievance and under no circumstance to interrupt production.

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10. Golden rule...

FOREMAN AND STEWARD: We will give each other courteous and straightforward consideration. We will avoid making critical comments about each other, and we will cooperate in developing a friendly and sincere relationship between formen and stewards.

they're saying in conferences...

Three companies tell how costs went down and production went up and became easier as a result of organized programs of simplification

MUCH of the current discussion of automation deals with factories of the future – giant, complicated series of machines that will turn raw materials into finished products and leave little for humans to do outside of pushing buttons. However, automation can also mean the simple process of making it easier and more efficient to accomplish an operation by using better machines.

This kind of automation can come about as a result of many kinds of organized progress campaigns. In the three examples presented here, excerpted from recent AMA conferences, one is a report of some of the results of an over-all cost-cutting campaign; another deals with an attempt to discover a better way to turn out a more uniform product; and the third is a report of efforts to both lower costs and simplify the production procedure. All three companies have discovered the same thing—a better and more efficient way of doing work.

Sweeper and Boiler Cut Costs

The solution of today's expense problem is only a step toward that mythical goal—"the lowest possible unit cost," said Robert D. Welles, Plant Superintendent, the Randall Company, in describing his company's down-the-line cost-cutting campaign at the AMA Special Manufacturing Conference, in Cleveland.

"Formerly," he said, "the thought

of a floor brush or broom conveyed the impression of an inexpensive cleaning implement. But when we considered the price tag of the motivating force behind the handle, we concluded that this expense was far from being negligible – particularly since we employed eight porters on each of the two shifts to sweep our production departments, aisles, parking lot, sidewalk, and driveways.

"Previously we had ruled out the use of mechanical equipment as impractical because of our narrow, congested aisles. However, with the introduction of a vacuum-type power sweeper with a 24-inch beam, our problem was solved. This little gasoline-driven machine works over 43,300 square feet of accessible cleaning surface at speeds ranging from four to eight miles per hour, leaving a clean path two feet wide—ideal for our plant. It performs the work of eight men, and will pick up dust, paper, metal chips, and other foreign material, including heaps of rubbish more than two inches high.

"At present, three porters clean around production machinery in a closely supervised group, sweeping into the aisles. They move from one department to another, while the sweeper, on scheduled tours, picks up the accumulation. After deducting amortization costs, repairs, gas, oil, and brush replacements, our annual savings amount to $28,200 in indirect labor."

In another instance, Mr. Welles reported that "heat in the Cincinnati plant was supplied by a coal-fed boiler-type heating installation, which required the services of three attendants per day, seven days a week.

"In 1953, this unit was converted to a combination automatic oil- and gas-burning boiler system. An analysis of the comparison between the use of coal and the use of oil and gas follows (considering the total cost of heating with coal as 100 per cent):

Cost of coal	25.4%
Earnings of firemen	74.6%
Cost to heat with gas and oil	37.8%
Total savings with amortization costs deducted	54.6%

"In addition, the space formerly required for coal storage has been utilized for other work, the absence of coal dust has improved working conditions, and the problem of transportation of fuel has been eliminated."

Isotopes for Inspection

Work on the problem of controlling the uniformity of a product with many variables resulted in a vastly improved method of inspection and great cost reduction for The Carborundum Company. Edward W. Bratton, Assistant Manager of Abrasives Engineering, described the installation of beta-ray gauges on the production lines of the Coated Abrasives Division at the AMA Special Conference on Automation, in New York City.

Mr. Bratton pointed out that "although coated abrasives (better-

known to the layman as sandpaper) date back to the thirteenth century, when the Chinese cemented crushed shells to parchment with natural gums, most people have little contact with them apart from flint paper and emery cloth, the types used at home and obtainable in the average hardware store.

"The industrial applications of coated abrasives are much more demanding and much more widespread. Typical are heavy metal removal, wide-belt grinding, portable-belt grinding, disc grinding, and industrial woodworking. Consider, for example, a backstand belt grinder that can remove steel stock at the rate of one inch every 20 seconds, or a flat-belt grinder (belts up to 86 inches wide are now available) on which a tapered skin for a jet plane or a guided missile is ground.

"About 2,000 basic types of coated abrasives are available to home and industry, including such abrasives as Flint, Emery, Garnet, Crocus, and Cork in particle sizes ranging from a few microns up to an eighth of an inch. These are coated on paper, cloth, fiber, or combinations of these materials and bonded with glue resin and varnish.

"With so many product variables to be controlled, it is apparent that many problems are encountered in obtaining reproducible product uniformity.

"The manufacturing process is a continuous one, in which a layer of adhesive is calendered on one side of a backing material, and while it is

"I wish Preston would learn to delegate responsibility."

still tacky, abrasive grains are imbedded in the adhesive in an oriented arrangement. After the web, or backing, has been partly dried in a festoon dryer to preserve the orientation, a sizing coat is applied to anchor the abrasive grains. The adhesive is then dried or cured.

"Until 1952, process control at Carborundum had been on a cut-and-try basis, making it necessary to stop the machine every 1,000 yards or so and cut samples manually. Between weight-sample stops, we had to rely on one or more trained observers to detect and report product changes.

New method needed

"Conventional methods of measurement cannot be used in making coated abrasives, since it is impossible to have a mechanical contact with the coating either during or after processing. Thus, as early as 1948, our research department began to explore the use of radio isotopes as a means of continuous sampling. It was recognized that such a method was free from conventional limitations and was not seriously affected by external influences such as moisture and dust, which are always present around coated-abrasive-making equipment. For the next several years, therefore, research personnel worked with a supplier of nuclear gauging equipment, until, in 1952, it was felt that sufficient progress had been made to experiment with a set of five gauges on one of our manufacturing machines.

"The gauges use a beam of high-speed electrons—beta rays—emitted by radioactive strontium 90 in a sealed capsule located in the lower part of the U-frame and absorbed by a radiation detector in the upper part. The rays pass through the material traveling through the machine and measure the weight on a continuous basis.

"In our installation, the first gauge measures the weight of the backing, the second measures the backing plus the adhesive, and the third measures the backing plus the adhesive plus the abrasive. The fourth gauge measures the same three elements as the third except that the material has passed through the festooning rack and lost most of the solvent in the adhesive. Finally, the fifth gauge measures the additional weights of the sizing coat.

"Each of the five gauges can be positioned at any spot across the width of the web simply by pushing a button, or it can be placed on auto-traversing, traveling back and forth across the web and providing continuous information from across the whole width. This gives the operator information previously unavailable.

Trial basis

"The gauges were originally installed on a trial basis. One of our stand-by machines was set aside for the experiment, and a series of runs were made with different materials. These extended over a two-week period. First, the recorders were masked; then, using identical mate-

rials, the runs were repeated with the recorders exposed so that the operators could see and make the indicated adjustments.

"An analysis of the two charts readily convinced management of the value of the gauges. For example, we discovered very early in the use of beta-gauge control that some of our backing materials varied considerably more than we had expected—as much as twice the weight tolerance both lengthwise and crosswise. Also, adhesive weights varied as much as 10 per cent between weight-sample stops without being noticed by the inspector or the operator. With nuclear control it was demonstrated that the variation could be held to ± two percent when the the operators made adjustments from information provided by the gauges and even less when the feedback from the gauge was used to automatically control the calender rolls.

"The gauges also did double duty by confirming the existence of certain equipment defects.

"Our engineers summarize the results of using beta gauges as follows:

1. An annual saving of about $13,000 in material that would have been wasted because of stop marks and sample cutouts (the old method of process control).

2. An annual saving of $12,000 due to reduction of machine downtime for sampling and maintenance.

3. An annual saving of $45,000 in raw-material utilization.

4. An annual estimated saving of $15,000 due to reduction of rejects."

New Systems for Dixie

Improved operating efficiency was the aim of the Dixie Cup Company. J. W. Kuebler, Vice President in Charge of Production, described a few of the company's efforts toward making the production processes more automatic at AMA's Special Conference on Automation, New York City.

"We have all heard or read numerous descriptions of just what automation really is," Mr. Kuebler said. "It has been called automatic, continuous production and classified as continuous, intermittent, or nonmanufacturing. Without attempting still another definition of automation, we at Dixie may say at once that we do not have an automatic, continuous process. We do know, however, that – regardless of definition – we have the same objectives in that we are continuously attempting to make our operation as automatic and efficient as possible – objectives which, further, are as old as industry itself. Changes which now are included in efforts to convert a process to automation have long been a part of our attempt to make our operations more efficient and more automatic.

"Twenty-five years ago, for example, in delivering finished stock from our forming departments to our warehouse, we used hand trucks to move skid loads of cases that had been hand-sealed with no more equipment than a paintbrush and a bucket of glue. This time-consuming method has been replaced by con-

veyors and automatic case sealers. Or take the forming of our Fountain Dixies – those cone-shaped cups which have a rolled brim and are used with holders at soda fountains. Years ago there were four operating stages from the time when the paper was slit to the proper width to the point at which the finished production was ready for delivery to the warehouse: printing, blanking, side-forming, and top-forming. Printing is still an independent operation, but the other three have been combined, with the printed roll placed on a single cup-forming machine which blanks, side-forms, and top-finishes the Dixies.

"Again there is the problem of handling our blanking cuttings. Initially they were dropped on the floor beneath the machines, picked up by hand, and placed in waste boxes which were loaded on a hand truck. An elevator then conveyed truck and handler to a lower floor, where the handler took his truckload of waste to the baling area, returning to the production area with boxes from a previous delivery which had been emptied manually for baling. This cumbersome procedure is no longer used. Instead, blanking cuttings drop onto a conveyor which empties into a gravity chute. The discharge end of this chute is located over a large movable rack, which, when filled, can be moved a few feet to the baler. A door is then opened, and the cuttings are emptied directly into the baler.

"These improvements, it might be added, are just three of the scores which could be cited. Why, then, did we feel the need for a revised approach to our production problems? Simply because production management recognized that if Dixie was to maintain its position in the paper cup and container field, we would have to be there first—with the best at lower costs. Additional – and immediate – effort toward making the process automatic and continuous was therefore a 'must.' " ◆

Ideas Versus Tradition

Recently, I heard a speaker describe how Charles Kettering, the great creative genius, awakened frequently in the middle of the night with ideas. It was his custom to record these ideas on the wallpaper close to his bed and then return to his slumbers. I was sitting next to a very good friend of mine when I heard this story. He leaned over and whispered, "That would be frowned on at my house."

It is evident that my friend grew up in an atmosphere in which deviations from neat, orderly, standard practice were not tolerated. He is an extremely able person, but could he ever become a Kettering? The home environment must encourage development of creative ability. Similarly, the research environment must also encourage unorthodox thinking.

—Jules D. Porshe, at AMA's Finance Division Conference, New York City

LETTERS TO THE EDITOR

The Office Gossip

DEAR SIR:

I would appreciate someone's writing an article on "How to Handle Gossip in the Office." Our department is made up almost entirely of young girls just out of high school, and since our city is quite small, most of the girls know or have heard about one another. When a new girl starts to work, everyone knows about her past within a day.

HELEN WENDT, Supervisor
Detroit Automobile Inter-Insurance Exchange
Kalamazoo, Mich.

● An excellent idea. We're trying to line up someone experienced with this problem. If any readers have successfully handled gossip, we'll be happy to hear from them.—ED.

Case Study for Students

DEAR SIR:

I'd like permission to reprint "When Levels of Management Disagree" [January, 1956] in the form of a case study, for use at George Washington University in a management course for graduate engineers.

GILBERT C. JACOBUS
Director of Field Operations
Army Logistics Research
George Washington University
Washington, D. C.

Men or Boxes?

DEAR SIR:

I notice that your editorial policy favors the common expression "handling people." I believe that you can handle boxes, paper, and other things, but people resent being handled or used.

RALPH HAYWOOD, President
The Humanics Corp.
Chicago, Ill.

● Webster's Dictionary says, "*Handle* implies acquired skill directed to the accomplishment of ends and is used especially in reference to men and situations." Perhaps the most important point is a man's attitude toward other men when he uses the word.—ED.

SM Strikes Home

DEAR SIR:

We want to express our highest compliments on your new magazine. Those of us in management here agree that it is the most outstanding service of its type that we have run across. We are particularly impressed that each issue will contain a number of articles which strike home at specific problems in our own organization.

JOHN SUGDEN
Personnel and Office Manager
Kellogg Company
San Leandor, Cal.

No Growing Pains

DEAR SIR:

I have been studying the first three issues of SUPERVISORY MANAGEMENT with considerably more than casual interest. Even in its short life, I think it has grown in stature, in spite of the fact that the first issue was certainly of very high caliber.

G. R. HARMON, Director of Training
General Mills, Inc.
Minneapolis, Minn.

We are always interested in receiving comments, articles, or suggestions from readers. All material should be addressed to Hubert Clay, Editor, SUPERVISORY MANAGEMENT, American Management Association, 1515 Broadway, Times Square, New York 36, N. Y.

AMA